| Item     | SAI#          | Applicant  | Project Title   |             | Funding     |           |         | sitions |       |
|----------|---------------|--|---|-------------|-------------|-----------|---------|---------|-------|
| nem      | JAI#          | Аррисанс   | Project Tide  | Federal     | State       | Other     | Federal | State   | Other |
|          |               |  |   |             |             |           |         |         |       |
| New Bus  | 2599          | Department of Health and Social Services, Public Health, Community Health                                  | Maternal, Infant and Early Childhood Home Visiting Formula Grant  | \$3,665,161 | \$2,469,639 | \$0       | 3.00    | 0.00    | 0.00  |
|          |               |  |   |             |             |           |         |         |       |
| 2        | <u>2617</u>   | Department of Labor, Employment and Training, Employment and Training Services                             | TechHire Partnership Grant  | \$3,999,988 | \$0         | \$0       | 1.20    | 0.00    | 0.00  |
| 3        | 2016-03-03-01 | Department of Education  | New Skills for Youth  | \$0         | \$0         | \$100,000 | 0.00    | 0.00    | 0.00  |
| Continue | ed            | _  |   |             |             |           |         |         |       |
| 4        | 2588          | Executive, Criminal Justice, Criminal Justice Council  | Residential Substance Abuse Treatment   | \$56,744    | \$18,915    | \$0       | 0.00    | 0.03    | 0.00  |
| 5        | <u>2595</u>   | Other Elective, Insurance Commissioner, Bureau of Examination, Rehabilitation and Guaranty                 | State Health Insurance Assistance Program   | \$200,984   | \$0         | \$0       | 2.00    | 0.00    | 0.00  |
| 6        | <u>2591</u>   | Legal, Office of Attorney General  | High Intensity Drug Trafficking Areas Program   | \$75,000    | \$0         | \$0       | 0.00    | 0.00    | 0.00  |
| 7        | <u>2587</u>   | Department of Health and Social Services, Public Health, Community Health                                  | Medical Monitoring Project  | \$311,482   | \$0         | \$0       | 1.40    | 0.00    | 0.00  |
| 8        | <u>2598</u>   | Department of Health and Social Services, Public Health, Community Health                                  | State Office of Rural Health  | \$172,000   | \$1,335,357 | \$0       | 1.25    | 0.00    | 0.00  |
| 9        | <u>2535</u>   | Department of Natural Resources and Environmental Control, Office of Natural Resources, Fish and Wildlife  | Avian Influenza Surveillance  | \$10,000    | \$0         | \$0       | 0.02    | 0.00    | 0.00  |
| 10       | <u>2580</u>   | Department of Natural Resources and Environmental Control, Office of Natural Resources, Fish and Wildlife  | Amphibian and Reptile Monitoring and Conservation   | \$40,962    | \$22,056    | \$0       | 0.08    | 0.09    | 0.00  |
| 11       | <u>2582</u>   | Department of Natural Resources and Environmental Control, Office of Natural Resources, Fish and Wildlife  | Beach and Island Nesting Bird Monitoring Protection   | \$26,666    | \$14,358    | \$0       | 0.00    | 0.08    | 0.00  |
| 12       | <u>2586</u>   | Department of Natural Resources and Environmental Control, Office of Natural Resources, Fish and Wildlife  | Administrative Support for the Delaware Land Acquisition Program  | \$67,272    | \$22,424    | \$0       | 0.65    | 0.08    | 0.00  |
| 13       | <u>2592</u>   | Department of Natural Resources and Environmental Control, Office of Environmental Protection, Air Quality | Particulate Matter 2.5 - Air Quality Monitoring   | \$933,054   | \$0         | \$0       | 1.50    | 0.00    | 0.00  |
| 14       | <u>2594</u>   | Department of Agriculture, Animal Health   | Umbrella National Surveillance  | \$215,590   | \$0         | \$0       | 0.00    | 0.00    | 0.00  |
| 15       | <u>2596</u>   | Department of Agriculture, Animal Health   | Animal Disease Traceability   | \$6,000     | \$0         | \$0       | 0.00    | 0.00    | 0.00  |
| ligher E | ducation      | _  |   |             |             |           |         |         |       |
| 1        | 2016-03-05-01 | HE/University of Delaware  | RII Track-2 FEC: Neural Networks Underlying the Integration of Knowledge and Perception                     | \$5,028,755 | \$0         | \$0       |         |         |       |
| 2        | 2016-03-05-02 | HE/University of Delaware  | SNM: Scalable and Green Biomanufacturing of Genetically Engineered Nano-vesicles for Biosensor Applications | \$0         | \$0         | \$331,390 |         |         |       |

| Item | SAI#          | Applicant                 | Project Title   | Federal     | Funding<br>State | Other     | Positions<br>Federal State Other |
|------|---------------|---------------------------|---|-------------|------------------|-----------|----------------------------------|
| 3    | 2016-03-05-03 | HE/University of Delaware | Fulbright Gateway Orientation for Fulbright Foreign Students  | \$0         | \$0              | \$47,722  |                                  |
| 4    | 2016-03-05-04 | HE/University of Delaware | Functional Deficit of the Lower Leg After an Archilles Tendor Rupture   | \$692,370   | \$0              | \$0       |                                  |
| 5    | 2016-03-05-05 | HE/University of Delaware | Effect of Vibration on Muscle Properties, Physical Activity and Balance in Children With Cerebral Palsy   | \$1,732,478 | \$0              | \$0       |                                  |
| 6    | 2016-03-05-06 | HE/University of Delaware | Multifunctional siRNA/Antibody Nanocarriers to Treat Metastatic Triple-<br>Negative Breast Cancer   | \$1,249,995 | \$0              | \$0       |                                  |
| 7    | 2016-03-05-07 | HE/University of Delaware | 2016-2017 SEED Invitational Leadership Institute  | \$0         | \$0              | \$13,636  |                                  |
| 8    | 2016-03-05-08 | HE/University of Delaware | Emergency Response and Foam Depopulation Training and Testing for 3-D contractors   | \$51,796    | \$0              | \$0       |                                  |
| 9    | 2016-03-05-09 | HE/University of Delaware | Impacts of Climate Change on Sharks, the Ocean's Apex Predators   | \$0         | \$0              | \$43,830  |                                  |
| 10   | 2016-03-05-10 | HE/University of Delaware | Southern Ocean Water Column Stratification as an Amplifier of the Mid Pleistocene Transition  | \$261,849   | \$0              | \$0       |                                  |
| 11   | 2016-03-05-11 | HE/University of Delaware | FES Training For Lasting Walking Improvements for Young Individuals with CP   | \$2,402,201 | \$0              | \$0       |                                  |
| 12   | 2016-03-05-12 | HE/University of Delaware | Literature-based Portal for miRNA and Transcription Factor Knowledge Analysis in Health and Disease   | \$1,063,169 | \$0              | \$0       |                                  |
| 13   | 2016-03-05-13 | HE/University of Delaware | Exploration, Conservation, and Development of Marine Biodiversity in Fiji and the Solomon Islands   | \$0         | \$0              | \$259,256 |                                  |
| 14   | 2016-03-05-14 | HE/University of Delaware | An Investigation into the Effects of Forest Fragment Size, Shape, and Structure on Rainfall Redistribution and Solute Flux Within a City and Along an Urban-to-Rural Gradient | \$0         | \$0              | \$11,801  |                                  |
| 15   | 2016-03-05-15 | HE/University of Delaware | Integrated Meso to Macro-Scale Computational Framework with Mechanistic Shear Characterization for Modeling Textiles  | \$205,102   | \$0              | \$0       |                                  |
| 16   | 2016-03-05-16 | HE/University of Delaware | Role of Microenvironment in Directing Stem Cell-Derived Cardiomyocyte Specification   | \$0         | \$0              | \$136,955 |                                  |
| 17   | 2016-03-05-17 | HE/University of Delaware | Department of Health and Human Services, Health Resources and Services Administration, Leadership Education in Neurodevelopmental and Other Related Disabilities              | \$2,349,633 | \$0              | \$0       |                                  |

| Item | SAI#          | Applicant                 | Project Title   | Federal     | Funding<br>State | Other     | Positions<br>Federal State Other |
|------|---------------|---------------------------|---|-------------|------------------|-----------|----------------------------------|
| 18   | 2016-03-05-18 | HE/University of Delaware | Age-Dependent Osteoarthritis: Role of IGF-1 Suppression of TRPV4 Channels   | \$1,250,000 | \$0              | \$0       |                                  |
| 19   | 2016-03-05-19 | HE/University of Delaware | NDI Tool for Heat Damage Detection in Composites  | \$0         | \$0              | \$28,820  |                                  |
| 20   | 2016-03-05-20 | HE/University of Delaware | Accelerated Adhesive Cure for Nutplate Repair   | \$0         | \$0              | \$9,616   |                                  |
| 21   | 2016-03-05-21 | HE/University of Delaware | NRT: Convergence at the Interface of Climate and Energy (CICE)  | \$2,438,461 | \$0              | \$0       |                                  |
| 22   | 2016-03-05-22 | HE/University of Delaware | Aquatic Chemical Camouflage: Mechanisms, Functional Roles and the Effects of Habitat Degradation  | \$444,466   | \$0              | \$0       |                                  |
| 23   | 2016-03-05-23 | HE/University of Delaware | Women's Health and Disability: Building a Clinically Relevant Outcome Measure   | \$0         | \$0              | \$165,700 |                                  |
| 24   | 2016-03-05-24 | HE/University of Delaware | Investigating the Structure of Paramagnetic Aggregates from Colloidal Ellipsoids - 3  | \$96,154    | \$0              | \$0       |                                  |
| 25   | 2016-03-05-25 | HE/University of Delaware | Modeling and Experimental Analysis of Event Timing in Single Cells  | \$0         | \$0              | \$134,277 |                                  |
| 26   | 2016-03-05-26 | HE/University of Delaware | The Effects of Chemotherapy Based Cognitive Deficits on Risk Assessment and Decision Making   | \$0         | \$0              | \$553,584 |                                  |
| 27   | 2016-03-05-27 | HE/University of Delaware | Collaborative Research: NRT-IGE: Local-to-Polar Connections   | \$133,928   | \$0              | \$0       |                                  |
| 28   | 2016-03-05-28 | HE/University of Delaware | SNM: Integrated Design, Production, and Process Control of Wear-<br>Resistant and Self-Cleaning Nanostructured Coatings: Processing,<br>Scalability, and Morphology Control | \$994,084   | \$0              | \$0       |                                  |
| 29   | 2016-03-05-29 | HE/University of Delaware | Collaborative Research: Scalable Manufacture of Aligned Self-<br>Assembled Soft Nanostructures for Biomimetic Responsive Actuators  | \$143,062   | \$0              | \$0       |                                  |
| 30   | 2016-03-05-30 | HE/University of Delaware | Efficient On-Aircraft Composite Repair Process Requiring Minimal Support Equipment  | \$0         | \$0              | \$28,030  |                                  |
| 31   | 2016-03-05-31 | HE/University of Delaware | SURVICE/AF Turbulent Fluid Density Reconstruction via Compressive Tomographic Background Oriented Schlieren Measurement Arce  | \$0         | \$0              | \$28,915  |                                  |
| 32   | 2016-03-05-32 | HE/University of Delaware | Interpre-professional Training in Empathy & the Health Professions  | \$0         | \$0              | \$28,757  |                                  |

| Item | SAI#          |                           | Applicant | Project Title   | Federal   | Funding<br>State | Other    | Positions<br>Federal State Other          |
|------|---------------|---------------------------|-----------|---|-----------|------------------|----------|---|
| 33   | 2016-03-05-33 | HE/University of Delaware |           | The International Association of Laboratory Schools - Mindful Teaching and Learning in Early Childhood Classrooms: Curriculum Development, Refinement and Collaborative Staff Development | \$0       | \$0              | \$2,000  | 7 3 3 3 4 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 |
| 34   | 2016-03-05-34 | HE/University of Delaware |           | How cartilage works: unifying interstitial lubrication and hydrodynamics to explain joint function  | \$284,120 | \$0              | \$0      |   |
| 35   | 2016-03-05-35 | HE/University of Delaware |           | Collaborative Research: Developing a profiling glider pH sensor for high resolution coastal ocean acidification monitoring  | \$175,002 | \$0              | \$0      |   |
| 36   | 2016-03-05-36 | HE/University of Delaware |           | Collaborative Research: NRT-INFEWS: Entrepreneurial Graduate Research and Education at Clean Energy-Food-Water Nexus  | \$994,003 | \$0              | \$0      |   |
| 37   | 2016-03-05-37 | HE/University of Delaware |           | In-Field Repair Procedure for Fiber-Reinforced Composite Structures   | \$0       | \$0              | \$28,847 |   |
| 38   | 2016-03-05-38 | HE/University of Delaware |           | Meniscus Damage and Failure: The Mechanical Role of Fascicle Structure and Tears  | \$274,998 | \$0              | \$0      |   |
| 39   | 2016-03-05-39 | HE/University of Delaware |           | Electroacupuncture for the Treatment of Chronic Ankle Instability   | \$0       | \$0              | \$18,182 |   |
| 40   | 2016-03-05-40 | HE/University of Delaware |           | Intel VEC: Small: Collaborative Research: Joint Compressive Spectral<br>Imaging and 3D Ranging Sensing using a commodity Time-Of-Flight<br>Range Sensor Arce                              | \$0       | \$0              | \$25,000 |   |
| 41   | 2016-03-05-41 | HE/University of Delaware |           | Collaborative Research: Response of Bio-Stabilized Coastal Dunes to<br>Extreme Surge and Wave Hazards: From Granular-Scale Mechanics<br>to Design-Scale Engineering                       | \$361,028 | \$0              | \$0      |   |
| 42   | 2016-03-05-42 | HE/University of Delaware |           | The Structure of the Air-Flow Above Surface Waves   | \$144,973 | \$0              | \$0      |   |
| 43   | 2016-03-05-43 | HE/University of Delaware |           | Evolution of Small Scale Seafloor Topography and Sediment Transport under Energetic Waves: From Ripples to Sheet Flow   | \$390,268 | \$0              | \$0      |   |
| 44   | 2016-03-05-44 | HE/University of Delaware |           | Collaborative Research: Combined Experimental/Numerical Investigation of Spray Generation, Transport, and Momentum Flux Modification  | \$351,794 | \$0              | \$0      |   |
| 45   | 2016-03-05-45 | HE/University of Delaware |           | Collaborative Research: Observational and Modeling Investigations of the Wintertime Dynamics of East Coast Submarine Canyons  | \$23,341  | \$0              | \$0      |   |
| 46   | 2016-03-05-46 | HE/University of Delaware |           | Collaborative Research: Optimization of Electrode Materials under<br>Uncertainty to Control Self-Discharge of Electric Double Layer<br>Capacitors   | \$237,641 | \$0              | \$0      |   |
| 47   | 2016-03-05-47 | HE/University of Delaware |           | 2016 NIST Summer Undergraduate Research Fellowship Program; (SURF Gaithersburg/Boulder)   | \$36,000  | \$0              | \$0      |   |

| Item | SAI#          | Applicant                 | Project Title   | Federal     | Funding<br>State | Other     | Positions<br>Federal State Other |
|------|---------------|---------------------------|---|-------------|------------------|-----------|----------------------------------|
| 48   | 2016-03-05-48 | HE/University of Delaware | Unresolved Post-Concussion Balance Deficits and Subsequent<br>Musculoskeletal Injury  | \$0         | \$0              | \$50,000  |                                  |
| 49   | 2016-03-05-49 | HE/University of Delaware | Attachment and Biobehavioral Catch-up with Child Protective Services-<br>Involved Parents: Testing Effectiveness in Community Context and<br>Optimizing to Individual Needs | \$1,921,888 | \$0              | \$0       |                                  |
| 50   | 2016-03-05-50 | HE/University of Delaware | Mechanical Properties as a Biomarker for Tendon Health in Basketball Players  | \$0         | \$0              | \$217,210 |                                  |
| 51   | 2016-03-05-51 | HE/University of Delaware | Upper Ocean Turbulence in Non-Equilibrium Conditions  | \$242,301   | \$0              | \$0       |                                  |
| 52   | 2016-03-05-52 | HE/University of Delaware | Doctoral Dissertation Research: Re-Wilding the Body in the Anthropocene: Lessons from the Microbiome and the Paleo Diet   | \$12,057    | \$0              | \$0       |                                  |
| 53   | 2016-03-05-53 | HE/University of Delaware | Collaborative Research: A Novel Methodology for Non-Destructive<br>Evaluation of Concrete Members using Self-Sensing Reinforcing Bars                                       | \$129,104   | \$0              | \$0       |                                  |
| 54   | 2016-03-05-54 | HE/University of Delaware | Probabilistic Modeling to Account for Variability in Liquid Composite Molding Processes   | \$217,523   | \$0              | \$0       |                                  |
| 55   | 2016-03-05-55 | HE/University of Delaware | Multifunctional Collagen Mimetic Materials to Enhance Bone Repair   | \$150,000   | \$0              | \$0       |                                  |
| 56   | 2016-03-05-56 | HE/University of Delaware | MIDAS: Malware Identification and Detection using Analytics for SCADA   | \$2,737,642 | \$0              | \$0       |                                  |
| 57   | 2016-03-05-57 | HE/University of Delaware | Determination of Activation of Aluminum Sulfate on Ammonia Control for Broiler Litter under Winter Conditions   | \$0         | \$0              | \$45,659  |                                  |
| 58   | 2016-03-05-58 | HE/University of Delaware | Lessons Learned from Lymphatic Endothelial Cells: Treating Cardiovascular Endothelial Cells to Prevent Extravasation and Halt Metastasis                                    | \$0         | \$0              | \$274,064 |                                  |
| 59   | 2016-03-05-59 | HE/University of Delaware | NJHC Mauricetown National Register Historic District Nomination   | \$0         | \$0              | \$10,407  |                                  |
| 60   | 2016-03-05-60 | HE/University of Delaware | Understanding the Implications of Hierarchy and Multicomponent<br>Nanostructured Materials on Macroscopic Toughness in Solids   | \$220,892   | \$0              | \$0       |                                  |
| 61   | 2016-03-05-61 | HE/University of Delaware | Assessing the Role of Predation on Coral Reef Connectivity:<br>Detangling Competition, Habitat Quality and Food Availability in Recruit<br>Survival                         | \$493,618   | \$0              | \$0       |                                  |
| 62   | 2016-03-05-62 | HE/University of Delaware | Application of Lattice Boltzmann Method in Enhanced Simulation of Tsunamis and Hydro-acoustic Waves   | \$127,420   | \$0              | \$0       |                                  |

| Item | SAI#          |                           | Applicant | Project Title  | Federal   | Funding<br>State | Other     | Positions<br>Federal State Other |
|------|---------------|---------------------------|-----------|--|-----------|------------------|-----------|----------------------------------|
| 63   | 2016-03-05-63 | HE/University of Delaware |           | Collaborative Research: Stability, Flexibility, and Functionality of Thermally Tolerant Coral Symbioses  | \$553,568 | \$0              | \$0       |                                  |
| 64   | 2016-03-05-64 | HE/University of Delaware |           | Collaborative Research: Towards Resilient and Smart Vehicle-<br>Renewables-Grid Integration: A Game Theoretic Framework  | \$158,155 | \$0              | \$0       |                                  |
| 65   | 2016-03-05-65 | HE/University of Delaware |           | Certification Modeling for Composites with Voids and Wrinkles for<br>Engines and Structures  | \$0       | \$0              | \$28,847  |                                  |
| 66   | 2016-03-05-66 | HE/University of Delaware |           | Transforming Graduate Education in the Humanities at the University of<br>Delaware Through Interdisciplinary and Inter-Institutional Partnerships<br>in African American Material Culture and Public Humanities Training | \$350,000 | \$0              | \$0       |                                  |
| 67   | 2016-03-05-67 | HE/University of Delaware |           | Collaborative Research: Mandibular Cartilage - A Fibro-Hyaline Hybrid for Shock Absorption and Lubrication   | \$160,735 | \$0              | \$0       |                                  |
| 68   | 2016-03-05-68 | HE/University of Delaware |           | Collaborative Research: The Impact of Time-Varying Winds on the Fate of Riverine Outflows on the Continental Shelf   | \$195,871 | \$0              | \$0       |                                  |
| 69   | 2016-03-05-69 | HE/University of Delaware |           | Stochastic Resonance Enhanced Sensation to Improve Balance and Function in CP  | \$282,776 | \$0              | \$0       |                                  |
| 70   | 2016-03-05-70 | HE/University of Delaware |           | Properties of Structural Composite Materials Using Novel Carbon Fibers   | \$0       | \$0              | \$30,023  |                                  |
| 71   | 2016-03-05-71 | HE/University of Delaware |           | High-Strain Capable, High-Strength Composites  | \$0       | \$0              | \$20,048  |                                  |
| 72   | 2016-03-05-72 | HE/University of Delaware |           | Harrington Value Institute Community Partnership Fund Social<br>Determinants and Unmet Social and Health Needs of Older<br>Delawareans   | \$0       | \$0              | \$299,946 |                                  |
| 73   | 2016-03-05-73 | HE/University of Delaware |           | Methodology for Producing Low Cost, Repeatable Washout Tooling with Improved Properties for use with High Temperature Composite Fabrication  | \$0       | \$0              | \$30,770  |                                  |
| 74   | 2016-03-05-74 | HE/University of Delaware |           | Spintronic Microwave Spectrum Analyzer   | \$0       | \$0              | \$40,314  |                                  |
| 75   | 2016-03-05-75 | HE/University of Delaware |           | Cuba: Food Sovereignty   | \$0       | \$0              | \$1,493   |                                  |
| 76   | 2016-03-05-76 | HE/University of Delaware |           | Impact of Diet Composition in Infancy on Energy Balance, Satiety, and Growth   | \$0       | \$0              | \$588,623 |                                  |
| 77   | 2016-03-05-77 | HE/University of Delaware |           | Development and Validation of New Measures of Sexual Functioning in Individuals with SCI and TBI   | \$430,893 | \$0              | \$0       |                                  |

| Item | SAI#          | Applicant                 | Project Title  | Federal     | Funding<br>State | Other     | Positions<br>Federal State Other |
|------|---------------|---------------------------|--|-------------|------------------|-----------|----------------------------------|
| 78   | 2016-03-05-78 | HE/University of Delaware | Autonomous Micro Climate Sensor Swarm  | \$0         | \$0              | \$23,550  |                                  |
| 79   | 2016-03-05-79 | HE/University of Delaware | Aberrant DNA Methylation and Parenting Behavior Associated With Caregiver Maltreatment   | \$1,175,000 | \$0              | \$0       |                                  |
| 80   | 2016-03-05-80 | HE/University of Delaware | Exoskeletal Garments to Improve Function for Children With Movement Impairments  | \$1,250,000 | \$0              | \$0       |                                  |
| 81   | 2016-03-05-81 | HE/University of Delaware | Dynamic Stability in the ACL Injured Knee Snyder-Mackler   | \$323,141   | \$0              | \$0       |                                  |
| 82   | 2016-03-05-82 | HE/University of Delaware | Characterizing the Resistance of Diverse Lima Bean Lines to Agronomically Important Diseases in the Mid-Atlantic Region of the United States | \$12,595    | \$0              | \$0       |                                  |
| 83   | 2016-03-05-83 | HE/University of Delaware | DHHS ACL NIDILRR -State Developmental Disability Director and Leadership Institutes  | \$506,751   | \$0              | \$0       |                                  |
| 84   | 2016-03-05-84 | HE/University of Delaware | Impact of Pregnancy on Neuroimmune Function and Postpartum Behaviors   | \$0         | \$0              | \$70,000  |                                  |
| 85   | 2016-03-05-85 | HE/University of Delaware | Paving the Path to Brown in Delaware: Groundbreaking Landmarks of School Desegregation   | \$140,199   | \$0              | \$0       |                                  |
| 86   | 2016-03-05-86 | HE/University of Delaware | Fall-Recovery Training for Individuals with Chronic Stroke   | \$0         | \$0              | \$5,000   |                                  |
| 87   | 2016-03-05-87 | HE/University of Delaware | Development and Validation of a Cognition Endpoint for Traumatic Brain Injury Clinical Trials  | \$0         | \$0              | \$21,017  |                                  |
| 88   | 2016-03-05-88 | HE/University of Delaware | Patient Response to Medication Administered for Pain in the Immediate Hospitalization Following Lower Extremity Trauma                       | \$0         | \$0              | \$5,996   |                                  |
| 89   | 2016-03-05-89 | HE/University of Delaware | Fitbit + PT Intervention to Increase Physical Activity After Total Knee Replacement: A Pilot Study   | \$400,000   | \$0              | \$0       |                                  |
| 90   | 2016-03-05-90 | HE/University of Delaware | Evaluating the Effects of a Chemical Additive on Fermentation Characteristics and Aerobic Stability of Alfalfa and Corn Silage               | \$0         | \$0              | \$21,050  |                                  |
| 91   | 2016-03-05-91 | HE/University of Delaware | SimUTrach  | \$0         | \$0              | \$83,333  |                                  |
| 92   | 2016-03-05-92 | HE/University of Delaware | Tasting for two: Strategies to Enhance Liking and Intake of Fruit  | \$0         | \$0              | \$404,381 |                                  |

| Item | SAI#          | Applicant                 | Project Title  | Federal   | Funding<br>State | Other       | Positions<br>Federal State Other |
|------|---------------|---------------------------|--|-----------|------------------|-------------|----------------------------------|
| 93   | 2016-03-05-93 | HE/University of Delaware | Highly Resilient, Hydrophilic Bioelastomers for Engineering Vocal Fold Tissue  | \$348,745 | \$0              | \$0         |                                  |
| 94   | 2016-03-05-94 | HE/University of Delaware | Pea Variety Demonstration  | \$0       | \$0              | \$2,200     |                                  |
| 95   | 2016-03-05-95 | HE/University of Delaware | Functional Assembly of Salivary Cells to Relieve Xerostomia  | \$0       | \$0              | \$828,459   |                                  |
| 96   | 2016-03-05-96 | HE/University of Delaware | Development of Accelerated Aging Testing Methodology to Determine Shelf Life for New High Performance Fibers   | \$424,262 | \$0              | \$0         |                                  |
| 97   | 2016-03-05-97 | HE/University of Delaware | Functional Assembly of Salivary Cells to Relieve Xerostomia  | \$793,647 | \$0              | \$0         |                                  |
| 98   | 2016-03-05-98 | HE/University of Delaware | Stereospecific Cross Couplings to Deliver Quaternary Stereocenters in High Enantiopurity   | \$0       | \$0              | \$47,619    |                                  |
| 99   | 2016-03-05-99 | HE/University of Delaware | CBEAR Seed Grant Program   | \$381,082 | \$0              | \$0         |                                  |
| 100  | 2016-03-06-01 | HE/University of Delaware | Lessons Learned from Lymphatic Endothelial Cells: Treating<br>Cardiovascular Endothelial Cells to Prevent Extravasation and Halt<br>Metastasis   | \$0       | \$0              | \$274,064   |                                  |
| 101  | 2016-03-06-02 | HE/University of Delaware | Lumilant/ARO Wavelength Specific Dielectric Obscurants using<br>Electromagnetically Engineered Nanoparticles Mirotznik   | \$0       | \$0              | \$243,496   |                                  |
| 102  | 2016-03-06-03 | HE/University of Delaware | UCDAVIS/NIH Stromule Caplan  | \$0       | \$0              | \$936,201   |                                  |
| 103  | 2016-03-06-04 | HE/University of Delaware | Delivering Polyandry to the Beekeeping Industry: From Proof-of-Concept to Train-the-Trainer  | \$667,388 | \$0              | \$0         |                                  |
| 104  | 2016-03-06-05 | HE/University of Delaware | Evaluation of the Delaware Plan to Reduce Unintended Pregnancy   | \$0       | \$0              | \$1,405,266 |                                  |
| 105  | 2016-03-06-06 | HE/University of Delaware | Kemin Industries, Inc. will Supply Certain Kemin Proprietary Materials to University of Delaware to Perform the Research project Described as Evaluating the Impact of USA Lysine on Performance of Lactating Dairy Cows | \$0       | \$0              | \$38,770    |                                  |
| 106  | 2016-03-06-07 | HE/University of Delaware | Proposal: Wideband Imaging Receiver System Upgrades  | \$201,663 | \$0              | \$0         |                                  |
| 107  | 2016-03-06-08 | HE/University of Delaware | A Low-Cost Automated and Noninvasive Tool for the Assessment of Cognition in Infants and Toddlers  | \$0       | \$0              | \$44,872    |                                  |

| Itom | C / I#        | Applicant                    | Project Title  |             | Funding |           | Positions           |
|------|---------------|------------------------------|--|-------------|---------|-----------|---------------------|
| Item | SAI#          | Applicant                    | Project Title  | Federal     | State   | Other     | Federal State Other |
| 108  | 2016-03-06-09 | HE/University of Delaware    | Molecular Tools for in Situ Modulation of Cell Microenvironments to Unravel Cancer Recurrence  | \$0         | \$0     | \$47,619  |                     |
| 109  | 2016-03-06-10 | HE/University of Delaware    | Kemin Industries, Inc. will Supply Certain Kemin Proprietary Materials to University of Delaware to Perform the Research Project Described as Evaluating the Availability of Rumen-Protected Amino Acid Products | \$0         | \$0     | \$46,000  |                     |
| 110  | 2016-03-06-11 | HE/University of Delaware    | Grant to Provide Support for Two Undergraduate Summer<br>Researchers to Work Full-time on Independent Research Projects<br>Focusing on the Equine Microbiome   | \$0         | \$0     | \$10,000  |                     |
| 111  | 2016-03-06-12 | HE/University of Delaware    | Development of Integrated Pest Management Systems for Organic Melons and Cucumbers   | \$0         | \$0     | \$91,979  |                     |
| 112  | 2016-03-06-13 | HE/University of Delaware    | Analytical Tools to Better Classify and Characterize Plant Small RNAs  | \$45,661    | \$0     | \$0       |                     |
| 113  | 2016-03-06-14 | HE/University of Delaware    | Biomolecular Interaction Technologies Fiscal Year 2016   | \$0         | \$0     | \$89,000  |                     |
| 114  | 2016-03-06-15 | HE/University of Delaware    | Confined Multifunctional Nanocatalysts by Design: Synergy of Supported Catalytic Nanoparticles   | \$0         | \$0     | \$110,000 |                     |
| 115  | 2016-03-06-16 | HE/University of Delaware    | Western States Leadership Institute on Developmental Disabilities  | \$0         | \$0     | \$104,348 |                     |
| 116  | 2016-03-06-17 | HE/University of Delaware    | The Selective Conversion of Carbon Dioxide to Hydrocarbons and the Oxidation of Pharmaceuticals in Water Using Photoelectrochemical (PEC) Process  | \$0         | \$0     | \$133,354 |                     |
| 117  | 2016-03-06-18 | HE/Delaware State University | Delaware Englisg and Language Learner Educatot Professional<br>Development Project   | \$2,637,139 | \$0     | \$0       |                     |
| 118  | 2016-03-06-19 | HE/Delaware State University | Acquisition of Goods and Services  | \$4,000     | \$0     | \$0       |                     |
| 119  | 2016-03-06-20 | HE/Delaware State University | Sumoylation on alpha-synuclein can be a protective target for dopaminergic neurons against oxidative stress  | \$438,000   | \$0     | \$0       |                     |
| 120  | 2016-03-06-21 | HE/Delaware State University | Mindfulness-Based Relapse Prevention (MBRO): Brain and Behavioral Mechanisms of change   | \$759,748   | \$0     | \$0       |                     |
| 121  | 2016-03-06-22 | HE/Delaware State University | RII Track-2 FEC- Understanding Submergence, Salinity, and Arsenic Stress in Salt Marsh grass (water), Switchgrass (bioenergy), and Rice (food) using an integrated Epigenomics and transcriptomics approach      | \$5,969,094 | \$0     | \$0       |                     |
| 122  | 2016-03-06-23 | HE/Delaware State University | Numerical Solution of SDEs with discountinuous source term   | \$18,500    | \$0     | \$0       |                     |

| Item | SAI#                       | Applicant                    | Project Title  | Federal   | Funding<br>State | Other | Positions<br>Federal State Other |
|------|----------------------------|------------------------------|--|-----------|------------------|-------|----------------------------------|
| 123  | 2016-03-06-24              | HE/Delaware State University | Modulation of dopamineric neurotransmission by pre-synaptic D2 auto-<br>receptors  | \$437,992 | \$0              | \$0   |                                  |
| 124  | 2016-03-06-25              | HE/Delaware State University | Development of Medical image quantification techniques   | \$95,722  | \$0              | \$0   |                                  |
| 125  | 2016-03-06-26              | HE/Delaware State University | Heiarchal simulation of breast tissue  | \$411,565 | \$0              | \$0   |                                  |
| 126  | 2016-03-06-27              | HE/Delaware State University | Bat monitoring in Cusuco National Park, Honduras: Filling in the gaps with Acoustics   | \$3,594   | \$0              | \$0   |                                  |
| 127  | 2016-03-06-28              | HE/Delaware State University | Targeting podoplanin to inhibit oral cancer cell motility and progression  | \$39,347  | \$0              | \$0   |                                  |
| 128  | 2016-03-06-29              | HE/Delaware State University | Sumoylation on alpha-synuclein can be a therapeutic target for<br>Parkinson's disease  | \$100,000 | \$0              | \$0   |                                  |
| 129  | 2016-03-06-30              | HE/Delaware State University | Symone Johnson Knauss Fellowship   | \$56,500  | \$0              | \$0   |                                  |
| 130  | 2014-07-02-14<br>Amendment | HE/Delaware State University | Consortium for Advanced Chemometrics and In-situ Anaylsis Using Laser Ablation Multi-Collector Inductively Couple Mass Spectroscopy (LA-MC-ICMS) Laser Induced Breakdown Spectroscopy (LIBS) | \$40,002  | \$0              | \$0   |                                  |